IN THE CLAIMS:

Please amend the claims as indicated below:

1.      (Currently amended) A method for ~~transforming~~ <u>characterizing</u> gene expression ~~signals~~,

5      the method comprising the steps of:

determining a plurality of gene expression signals for a gene; ~~and~~

~~deriving a transformation for transforming the plurality of gene expression signals~~

~~into transformed gene expression signals for the gene,~~ <u>transforming said plurality of gene</u>

<u>expression signals,</u> wherein ~~application of~~ said ~~transformation~~ <u>transforming</u> results in

10      <u>transformed gene expression signals having</u> a uniform distribution of ~~the transformed~~ <u>said</u> gene

expression signals within a selected interval~~[,]~~<u>;</u>

<u>using said transformed gene expression signals</u> ~~wherein each gene expression~~

~~signal is converted by the transformation into a transformed gene expression signal in the~~

~~selected interval, wherein said transformation allows said transformed gene expression signals to~~

15      ~~be compared, and wherein the uniform distribution of transformed gene expression signals may~~

~~be used~~ to determine gene expression patterns<u>; and</u>

<u>characterizing gene expression of an unknown sample by comparing said gene</u>

<u>expression of said unknown sample with said gene expression patterns.</u>

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2.      (Currently amended) The method of claim 1, further comprising the step of <u>transforming</u>

~~applying the transformation to an additional~~ gene expression signal<u>s of an additional sample</u>.

25      3.      (Currently amended) The method of claim 1, wherein the step of ~~deriving~~ <u>transforming</u>

comprises the steps of:

determining a function that approximates a distribution of the plurality of gene

expression signals for the gene; and

using the function to ~~create the transformation~~ <u>transform said plurality of gene</u> <u>expression signals, wherein said transformed gene expression signals have a uniform distribution</u> <u>of said gene expression signals within a selected interval.</u>

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4.      (Canceled)

5.      (Canceled)

10    6.      (Canceled)

7.      (Canceled)

8.      (Canceled)

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9.      (Canceled)

10.    (Canceled)

20    11.    (Canceled)

12.    (Canceled)

13.    (Canceled)

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14.    (Canceled)

15.    (Canceled)

16.    (Canceled)


17.    (Currently amended) A system comprising:

5              a memory that stores computer-readable code; and

a processor operatively coupled to the memory, the processor configured to implement the computer-readable code, the computer-readable code configured to:

determine a plurality of gene expression signals for a gene; ~~and~~

~~derive a transformation for transforming the plurality of gene expression signals~~

10    ~~into transformed gene expression signals for the gene,~~ transform said plurality of gene expression signals, wherein ~~application of~~ said ~~transformation~~ transforming results in transformed gene expression signals having a uniform distribution of ~~the transformed~~ said gene expression signals within a selected interval[,];

use said transformed gene expression signals ~~wherein each gene expression signal~~

15    ~~is converted by the transformation into a transformed gene expression signal in the selected~~ ~~interval, wherein said transformation allows said transformed gene expression signals to be~~ ~~compared, and wherein the uniform distribution of transformed gene expression signals may be~~ ~~used~~ to determine gene expression patterns; and

characterize gene expression of an unknown sample by comparing said gene

20    expression of said unknown sample with said gene expression patterns.


18.    (Currently amended) The system of claim 17, wherein the computer-readable code is further configured to ~~apply the transformation to~~ transform gene expression signals of an

25    additional ~~gene expression signal~~ sample.


19.    (Currently amended) The system of claim 17, wherein the computer-readable code is

further configured, during the step of deriving, to perform the steps of:

determine a function that approximates a distribution of the plurality of gene expression signals for the gene; and

use the function to ~~create the transformation~~ transform said plurality of gene expression signals, wherein said transformed gene expression signals have a uniform distribution of said gene expression signals within a selected interval.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Currently amended) An article of manufacture comprising:

a computer readable medium having computer readable code means embodied thereon, the computer readable program code means comprising:

a step to determine a plurality of gene expression signals for a gene; ~~and~~

a step to ~~deriving a transformation for transforming the plurality of gene expression signals into transformed gene expression signals for the gene,~~ transform said plurality of gene expression signals, wherein ~~application of~~ said ~~transformation~~ transforming results in transformed gene expression signals having a uniform distribution of ~~the transformed~~ said gene expression signals within a selected interval[,]:

a step to use said transformed gene expression signals ~~wherein each gene expression signal is converted by the transformation into a transformed gene expression signal in the selected interval, wherein said transformation allows said transformed gene expression signals to be compared, and wherein the uniform distribution of transformed gene expression signals may be used~~ to determine gene expression patterns: and

a step to characterize gene expression of an unknown sample by comparing said

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gene expression of said unknown sample with said gene expression patterns.

24.    (Currently amended) The article of manufacture of claim 23, wherein the computer-
readable code means further comprises a step to ~~apply the transformation to~~ <u>transform gene</u>
<u>expression signals of</u> an additional ~~gene expression signal~~ <u>sample</u>.

25.    (Currently amended) The article of manufacture of claim 23, wherein the computer-
readable code means is further configured, during the step of deriving, to perform:

a step to determine a function that approximates a distribution of the plurality of
gene expression signals for the gene; and

a step to use the function to ~~create the transformation~~ <u>transform said plurality of</u>
<u>gene expression signals, wherein said transformed gene expression signals have a uniform</u>
<u>distribution of said gene expression signals within a selected interval</u>.

26.    (Canceled)

27.    (Canceled)

28.    (Canceled)

29.    (Previously presented)  The method of claim 1, wherein the selected interval comprises
an interval between 0 and 1.